Stakeholder Workshop #1 Bear Creek Watershed-Scale Stormwater Plan

Existing Conditions Assessment

Eric Ferguson King County Department of Natural Resources and Parks November 4, 2015

Objectives

- Characterize existing conditions for the study area including base and storm flow situations.
- Compare existing conditions to historical values where feasible.
- Support development and calibration of a watershed model

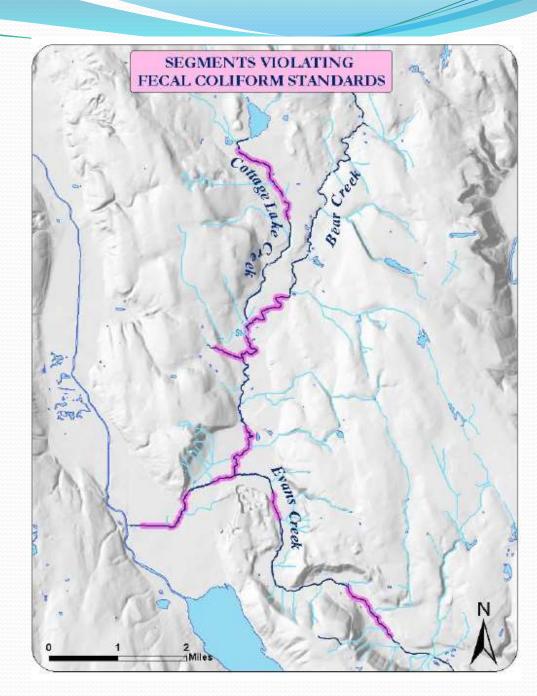
Existing Conditions Assessment

- This assessment includes: hydrologic, biologic, water quality, and the aquatic community.
- Types of data:
 - stream flows and precipitation
 - benthic macro-invertebrates
 - dissolved copper and zinc concentrations
 - water temperature
 - fecal coliforms
 - the presence and distribution of salmonid uses

TMDL

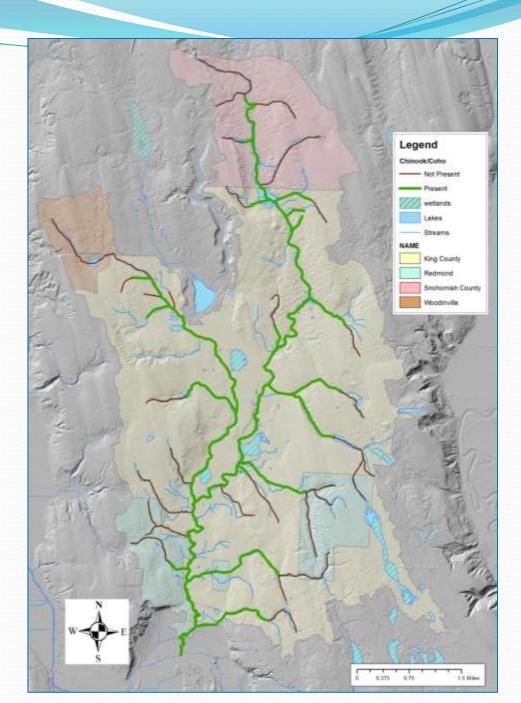
- Entire Bear Creek basin
 - Fecal Coliform
 - Temperature
 - Dissolved Oxygen
 - Riparian conditions

Figure from Ecology (2011)



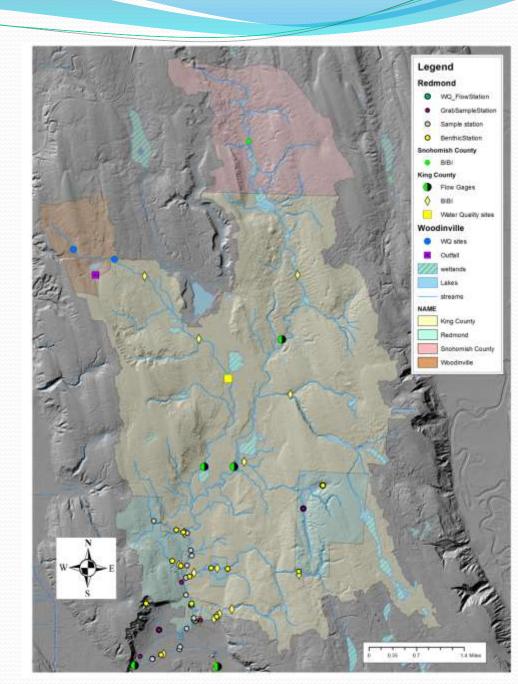
Fish Use Data

Salmon presence



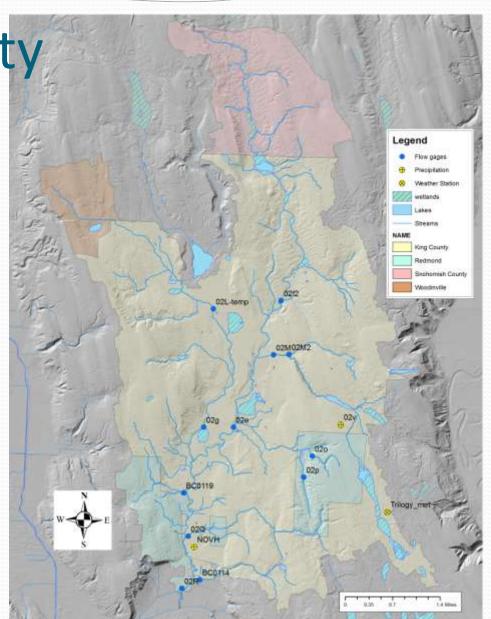
Existing Data Sites

- City of Redmond
- City of Woodinville
- Snohomish County
- WA Dept. of Transportation
- King County



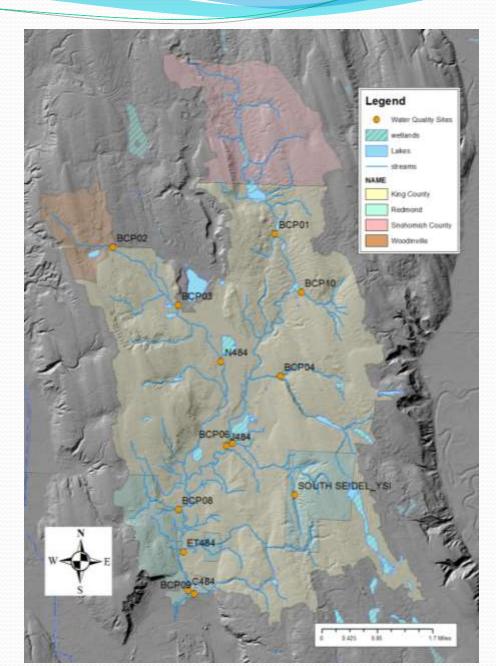
Current King County
Water Quantity Sites

- Twelve sites in Bear Creek
 Study Area
 - 7 existing sites
 - 5 new locations



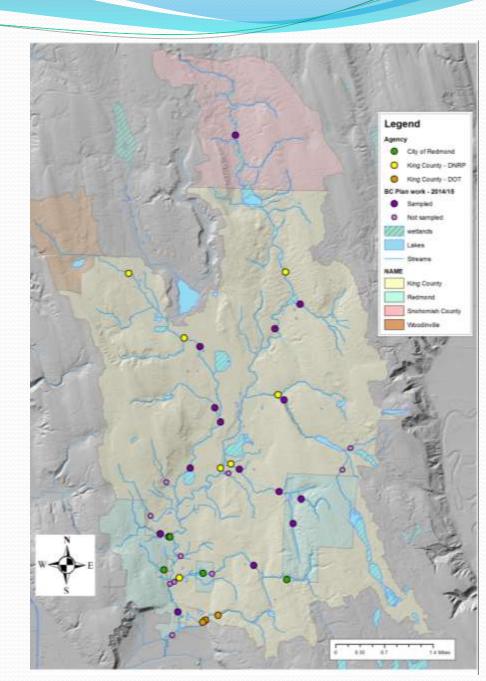
Current KC Water Quality Sites

- Thirteen sites in Bear Creek
 Study Area
 - 2 ambient sites
 - 3 historic sites
 - 8 new locations
- Locations for base and storm flow samples



Current KC BIBI Sites

- 40 sites in Bear Creek
 - 28 existing sites
 - 7 other agencies
 - Redmond
 - KC DOT
 - 5 new locations



Status of Monitoring

- Data collection thru Jan 2016
- BIBI completed
- Base flow events
 - 5 completed
 - Mar, Apr, Jun, Aug, Oct
 - Next December
- Storm flow events
 - 3 completed
 - Aug, Oct (2)
 - 3 before 1/31

